

# [A COMBINED PROPAGATION AND LATERAL RESISTIVITY DOWNHOLE TOOL]

## Abstract

A combined resistivity tool incorporating both induction/propagation antennas and lateral resistivity antennas disposed in recesses of downhole tubulars, in which a lateral resistivity antenna includes an insulating base layer disposed in the recess; a toroidal antenna disposed over the insulating base layer; and a shield disposed over the recess.